To CLUBS OR INDIVIDUALS, subscribing for

five or more copies-

Tri-Weekly, per annum, in advance......\$3 00

NEL.

In doing so, it is proper 1 should make known the principles it will maintain, and the policy it will ndvocate.

It will support cordially and earnestly the principles of the Democratic party of the United States. It does not propose to be the organ of any Department of the Government, except in so far as an independent maintenance of the doctrines of that party may represent its opinions and express its views.

It will not be ambitious to commend itself to the people by a blind flattery of their rulers. It will seek public support by the bold avowal of the sentiments which are common to the genuine Democracy of the Union, and by the condemnation of all such as may conflict with them, from whatever quarter they may come. It will seek to whatever quarter they may come. It will seek to be (and it will endeavor to deserve the title) the organ of the Democratic party of the United

States.
The Sentinet will maintain, as a fundamental The Sentinel will martain, as a fundamental truth of that great party, that the States formed the Union between them by the ratification of the Constitution as a compact; by which, also, they created the Federal Government, and delegated to it, as their common agent, the powers expressly specified in it, with an explicit reservation of all others to the States, or to their separate governments. The exercise of any powers beyond these thus delegated, is, therefore, an usurpation of the thus delegated, is, therefore, an usurpation of the reserved authority of the States by the agent of

their own creation.

The SENTINEL will uphold and defend the Union upon the basis of the rights of the States—under the Constitution—and thus by sedulously guarding the latter, it will the more effectually strengthen

and perpetuate the former.

With regard to the exercise of the powers of the Federal Government, the Sentinel will take as the principles of its action, that Congress shall ex-ercise no power which has not been delegated by the Constitution, according to a strict and fair interpretation of its language and spirit; and that it
shall not seek to attain indirectly an object through
the exercise of constitutional power, for the direct
attainment of which it has no delegation of power.
In other words, all powers exercised must be
clearly granted, and all granted powers must be
used for no purpose, except such as is clearly intended by the Constitution.

In respect to the internal administration of the
Government, the Sextingle will sustain the settled

Government, the SENTINEL will sustain the settled policy of the Democratic party. It will labor to inculeate this cardinal doctrine of Democratic internal policy:—that this Government will best promote the freedom and prosperity of the people of the States, by being less ambitious to exercise power, and more anxious to preserve liberty; and by leaving to the individual States the management of all their domestic concerns—while it con-tents itself with guarding the confederacy from external violence, and directing the foreign policy of the country to the promotion of the common interests, and defence of the common rights, and

honor of the States composing it.

The Sentinel will advocate such a progressive The Sentinel will advocate such a progressive foreign policy as will suit itself to the exigencies, and correspond with the expanding interests of the country. That policy should be energetic and decided; but should temper firmness with liberality, and make its highest ends consist with the strictest principles of justice. The real interests of the country, upon each occasion demanding attention, will be its guide in the course the Sentinel will pursue.

The national policy of the world in this age is essentially aggressive. In the growing sense of weakness of some of the nations of the Old World, and the ambitious restlessness of others, a com-

Our settled determination to repel interference from abroad with our domestic concerns, will prompt us to avoid it in the affairs of other counpeace should be threatened, our security endan-gered, or our interests invaded. For when the selfish interests of other nations prompt a foreign or colonial policy which jufringes upon our rights. and places in the pathway of our commerce dangerous and unfriendly rival, such a policy mus be resisted by remonstrance, and, if need be, by

Gur foreign policy should, indeed, be defensive: but to be properly desensive, it must sometimes be apparently aggressive. Our administration should be vigilant, watchful, and energetic. The world is full of important movements, commercial and political, deeply concerning American trade and American power. It is time we had an American foreign policy. We must have it. We cannot avoid it if we would. We have larger interests, and a greater stake in the world and its destiny, than every other people. We occupy the best portion of a continent, with no neighbors but a colony, and a worn-out, anarchical despotism. We are the only people whose own land, without colonial dependencies is made and a without colonial dependencies. pendencies, is washed by the two great oceans of the world. Our agricultural productions are more varied and more essential to civilized life, and to human progress—our mineral and manufacturing resources more vast—our facilities and capacity for internal and foreign commerce more extended than those of any other people living under one government. A continent, to a great extent, un-explored and exhaustless in its yet hidden wealth, is at our feet. European trade seeks the great East through avenues which are at our doors, or must be made through our own limits. Europe, Asia. Africa, and the isles of the sea, lying all around us, look to us as the rising power, through the agency of whose example, and ever widening and extending, though peaceful influences, the blessings of liberty, civilization, and religion, are destined to triumph over the barbarism and supersti-tion of the millions of the world. And shall such a people refuse to lay hold upon their destiny, and act upon the high mission to which it is called? A mission so full of hope, though so laden with responsibility, which, if properly directed, must make our confederacy the harbinger of peace to the world, as well as the peaceful arbiter of its

destiny.
The Sentinel will, therefore, advocate a bold and earnest foreign policy, such as the condition of the country demands; but it will advocate it under the flag of the country-nowhere else. Its foreign policy must be consistent with the spotless honor and unimpeachable good faith of the country. To be respectable at home and abroad, and to be great in the eyes of the world, it must ask for nothing but what is right, and submit to nothing that is wrong. It must be liberal and magnanimous to the rights of others, and firm and immoveable in insisting on its own. It must, in fine, be true to own interests, rights, and honor-it cannot then

be false to those of other nations.

Such, then, is the chart by which we shall be guided. Independent and free, we shall endeavor to be honest and truthful. The true friends of democratic principles we shall cordially suppor and defend. Its enemies in the field or in ambusi ve shall oppose, and on all proper occasions de-

To our future brethren of the press we extend

the hand of friendly greeting. The Sentinel is the rival of no press of its own party—the personal enemy of none of the other.

The present Democratic Administration has our best wishes for its success in the establishment o the great principles upon which it came into power, and in its honest labors to attain such an end it

will find the SENTINEL its friend and conditutor.

TERMS: For the Daily paper, \$10 a year, in advance. For the Tri-weekly, \$5 a year to single subscribers, and to clubs or persons subscribing for 5 or more copies, at the rate of \$3 a year. For the Weekly, \$2 a year to single subscribers, and to clubs or persons subscribing for five or more copies, at the rate of \$1 50 a year; in all cases payment to

at the rate of \$1.50 a year; an an ease, the made in advance.

All communications should be post paid, and addressed to Beverly Tucker.

Be Editors throughout the country are requested to copy the above Prospectus, and send us a copy of their paper, who shall receive in return a BEVERLEY TUCKER. WASHINGTON, Sept. 21, 1853.

CHESAPEAKE and Ohio Canal Stock wanted by PETER A. KELLER, Opposite the Treasury.

WASHINGTON SENTINEL.

DAILY.

CITY OF WASHINGTON, SUNDAY MORNING, OCTOBER 2, 1853.

Agencies and Law Offices.

OFFICERS AND SOLDIERS OF THE Mexican war, or others having claims against government.—Claims for bounty land and invalid pensions, in behalf of officers and Soldiers in the Mexican, Florida, or Revolutiona-Soldiers in the Mexican, Florida, or Revolutiona-ry war, or of 1512, extra-pay, moneys paid for rais-ing and subsisting troops; also, claims under the new pension law, in behalf of widows and or-phans of officers and soldiers, prosecuted by F. E. HASSLER, Sep 28—3t1aw Washington.

A GENCY FOR CLAIMS.—The subscriber lately, and for a number of years past, a Clerk in the Pension Office, offers his services to the public as Attorney and Agent for, prosecuting claims before Congress and the several Departments. Having access to the largest collection of evidence of Revolutionary service, particularly of officers of the Staff Department, to be found in the hands of any private individual, he feels confident it will enable him to render satisfactory and valuable service to those who may employ him to esable service to those who may employ him to es-tablish claims which have long remained suspend-ed for want of proof and proper attention.

Those engaging his services will be constantly kept advised of the progress of their claims.

All communications to be post paid.

He is permitted to refer to—
Col. J. J. Abert, Chief of Corps of Top. Engineers.
John Wilson, esq., Com. of the Gen. Land Office.
J. L. Edwards, esq., Late Com. of Pensions.
J. G. Berret, esq., Postmaster, Washington, D. C.
Maj. J. H. Eaton, Late Secretary of War.
Beverley Tucker, Washington.

ORRIS S. PAINE.

TO THE HEIRS OF OFFICERS AND Soldiers of the Revolutionary and other Wars.—The undersigned having established a perwars.—The undersigned having established a permanent General Agency at the seat of Government, for the prosecution of claims against the United States, continues to give his usual prompt attention to all business entrusted to his care.

The success he has achieved in bringing about a speedy settlement of old claims placed in his hands, justifies him in believing that he will be equally fortunate in behalf of his clients for the future. Suspended Pension and Bounty Land cases meet with special attention, and in no case will a fee be charged, unless the claim be allowed and paid by the Government.

There are many representatives of deceased Naval Officers who have claims that can be established.

lished by applying to the subscriber.
ROBERT H. GALLAGHER,
Formerly of Virginia.

References, (if necessary.)

Chubb Brothers, Bankers, Washington, D. C. John S. Gallagher, Esq., late Third Auditor of the U. S. Treasury; Hon. Jackson Morton, United States Senate; Drexell & Co., Bankers, Philadelphia; M. Judson, Esq., Banker, New Orleans; Wright & Williams, Bankers, Eric, Pennyslvania; Maury & Morton, Bankers, Richmond, Va.; Bur-eoyne & Plume, Bankers, New York; Ellis & Mor-ton, Bankers, Cincinnati, Ohio; and Johnson, Bro-

ther & Co., Bankers, Baltimore, Md. N. B.—I have facilities for establishing service in Wayne's War, by which all entitled to Bounty Land, or Pension can secure the same. The difficulty heretofore in establishing the service referred to has grown out of the fact that the Department itself has no rolls of Wayne's War.

R. H. G.

Law NOTICE.—SIDNEY S. BAXTER, moved to Washington to practice law.

He will practice in the Supreme Court of the United States, the courts of the District of Columbia, and attend to any professional business confided to him.

fided to him.

Office in Morrison's new building on 4½ street, east of Pennsylvania avenue.

REFERENCES. Hon T I Allen Hon. Wm. Daniel. Hon. Richard Moncure, Hon. G. B. Samuels, Hon. G. H. Lee, of the Court of Appeals of

irginia. To the Judges of the Circuit Courts of Virginia To the senators and members of Congress from

A GENCY AT WASHINGTON.—To Claimants.—FRANCIS A. DICKINS continues to undertake the agency of claims before Congress and other branches of the government, including commissioners under treaties, and the various public offices. He will attend to pre emption and other land claims, the procuring of emption and other land claims, the procuring of patents for the public lands, and procuring scrip for Virginia bounty land warrants, and the confirmation by Congress of grants and claims to lands. claims for property lost in or taken for the service of the United States; property destroyed by the Indians, or while in the possession of the United States; invalid. revolutionary, navy, widows, and nalf-pay pensions; claims for revolutionary services, whether for commutation, half-pay, or ounty lands; also, claims for extra and ba bounty lands; also, claims for extra and back pay, ye., of soldiers, sailors and marines; as well those against the State of Virginia, as the United States; all claims, growing out of contracts with the gov-ernment, for damages sustained in consequence of he aciton or conduct of the government; and, in-leed, any business before Congress or the public of fices which may require the aid of an agent or attor-ney. His charges will be moderate, and dependupon the amount of the claim and the extent

of the service.
Mr. F. A. Dickins is known to most of those who nave been in Congress within the last few years, or who have occupied any public attention at

washington.

His office is on Fifteenth street, opposite to the freasury Department, and next door to the Bank of the Metropolis.

All letters must be postpaid.

Sep 28-1yd ENERAL AGENCY, Washington City, D. C.—The subscriber offers his services to the public in the prosecution of claims before Con gress or any of the Departments of the Government. Some years' experience as disbursing Agent at the Indian Department, with a general knowl-edge of the mode of transacting business in the offices of the Government, enables him to promise satisfaction to all who may intrust business of this

tharacter to his care.

He will also give special attention to the collection Columbia or vicinity; to negotiating loans, as well as the purchase or sale of Stocks, Real Estate, Land Warrants, \$c., \$c., or furnish information to cor-

espondents residing at a distance, in regard to my business which may interest them at the seat Office over the Banking-House of SELDEN.

VITHERS & Co., to whom he refers.

JAMES J. MILLER. JAMES J. MILLER.
N. B. References of the most satisfactory character will be given to correspondents in whatever State they may reside.

Sep. 24—1m

A TTORNEY FOR THE PROSECUTION of Claims, at Washington A of Claims, at Washington City.—The under-igned having been engaged successfully in the prosecution of Claims before the Departments and perfore Congress, for several years, will attend promptly to all claims entrusted to his care, and especially Revolutionary Pensions, Bounty Land, Extra-pay, and pensions for services in the war of 1812, and the Mexican war, as well as all the In-

Office on D street, one door east of 10th street.

H. C. SPALDING,

Sep 21—1t

Attorney

T AW AND CLAIM AGENCY OFFICE at Washington City.—Charles K. Sherman, Attorney at Law, respectfully tenders his profes-sional services to the public. He will give prompt and careful attention to any legal business confided to his care in any of the Courts of this District. to his care in any of the Courts of this District.

He will give the same attention to the prosecution of claims against the Government, before any of the Departments or Congress. In cases of magnitude or difficulty he will be assisted by his father, Charles E. Sherman, Esq., of this city. e on Louisiana avenue.

Educational.

Columbian College, Washington, D. C. The collegiste year of this institution will hereafter consist of one continuous session, beginning on the last Wednesday in September, and closing on the last Wednesday in June, on which day the annual commencement for conferring degrees will be held.

The ensuing session will open on the 25th of the present month.

The charges are:
For tuition per session of nine months, \$40.00

for tuition is the same, and for the use of room furniture, library, &c., \$25 per session. There is an admission fee of \$10, and a small charge each

an admission free of \$10, and a small charge each session for contingencies. Fuel and lights are furnished at cost, and washing at 37½ cents per dozen. The necessary college expenses of a boarding student will not exceed \$150 or \$190 per annum. All the bills are payable one half at the beginning, and the balance at the middle of the session.

With a view of giving to the different departments of instruction a wider extension, and at the same time of mesting a public want by rendering ments of instruction a wider extension, and at the same time of meeting a public want by rendering the advantage of the college available to a larger number and a more varied class of students, some important changes have been made in the order and arrangement of the students. A new course has been adopted, styled the Scientific Course, and the degree of Batchelor of Philosophy (B. P.) attached in the will occur about these years and the degree of Batchelor of Philosophy (B. P.) at-tached to it. It will occupy about three years, and will embrace all the studies of the regular course for the degree of Bachelor of Arts, with the ex-ception of the ancient languages. This course will be specially adapted to those who wish to ob-tain what is called a practical education, as the mathematical and scientific studies will have mathematical and scientific studies will have greater prominence than usual, particularly in their application to the arts and business of life. Those who may wish to become practical surveyors, engineers, or agriculturists, will be enabled, with the advice of the faculty, to select their studies with special reference to those objects, and will receive the aid of lectures and illustrations. The doors of the College will also be opened to those who may wish, under its general regulations, to pursue any branch of study for any length of time. They may, under the direction of the faculty, select such subjects as are suited to their views and objects in life, and, on examination, may receive a regular certificate of their standing and proficiency in the same.

The number of officers and instructors has lately been increased, and others will be added as the wants of the several departments may require.

Measures are in progress for filling immediately the chair of chemistry, geology, mineralogy, and botany in a manner that will add greatly to the in-

botany in a manner that will add greatly to the interest and profit of those studies.

The preparatory department has been placed
under careful and efficient management, in a building which has been handsomely fitted up for itsreception. It has an able and experienced teacher,
and is under the general supervision of the faculty.

It will thus afford the best advantages for laying the foundation of a thorough classical and mathe

the foundation of a thorough classical and indus-matical education.

Boarding pupils will be received under the im-mediate care and direction of the principal, and at about the same expense as regular college stu-

dents.

The buildings have recently undergone thorough repairs, and the grounds are being laid out and improved in a manner that will add much to the convenience and attractiveness of its already beautiful situation.

It is believed the College never presented so

strong inducements as it now does to young men who desire to obtain a thorough and liberal educa-J. S. BACON,

UNIVERSITY OF VIRGINIA.—The next session of this justifution will open the lat of October, and close the 29th of June following.

The university embraces the following schools,

3. mathematics; 4, natural philosophy, mineralogy, and geology; 5, chemistry; 6, medicine; 7, comparative anatomy, physiology, and surgery; 8, moral philosophy, rhetoric, and belies lettres, and political economy; 9, law. Also a lectureship of special anatomy and materia medica, and a demonstratorship of anatomy. The schools of ancient languages, modern languages, and mathematics, have each an assistant instructor; and in the school of law there is an adjunct professor. the school of law there is an adjunct professor.

the school of law there is an adjunct professor.
The expenses, (not including clothing, books, or
pocket-money.) are as follows:
Tuition fee, say three schools, at \$25 each.\$75 00
Boarding, including diet, room-furniture,
and attendance of servant, payable in

Matriculation fee, \$15; contingent depo-

Students of medicine are charged with four tickets, at \$25 each, and a dissecting fee of \$5. The fee in the immediate class of law is \$60; in

GESSNER HARRISON, Sep 21-tf NATIONAL MEDICAL COLLEGE.

Washin ton.—The Thirty-second Annual Course of Lectures will commence on the fourth Monday in October, and continue until March.

Thomas Miller, M. D., Professor of Anatomy and Physiology.

Wm. P. Johnson, M. D., Professor of Obstetrics and Diseases of Women and Children.

Joshua Riley, M. D., Professor of Materia Medica, Therapeutics and Hygiene.

John Fred. May, M. D., Professor of the Prin-

iples and Practice of Surgery.
Grafton Tyler, M. D., Professor of Pathology nd Practice of Medicine.

Robert King Stone, M. D., Professor of Micros opal and Pathological Anatomy. Lewis H. Steiner, M. D., Professor of Chemis

try and Pharmacy.
Charles F. Force, M. D., Prosector and Demon strator.

The facilities for the prosecution of practical natomy are ample.

Like most similar institutions in Europe, the

desks from which the regular lectures are given, and the wards for clinical instructions are under ne same roof. The extensive additions to the buildings since the last session, for the accommodation of the sick, will greatly extend the usefulness of the

medical and surgical clinic. The entire expense for a full course of lec-Martriculating fee (payable only once).....

hrough the whole course without charge.
ROBERT KING STONE, M. D., Dean of the Faculty.

Office and residence corner of F and 14th streets

TODERN LANGUAGES ... D. E. Groux A native of France, teacher of Modern Lan guages, especially French, Spanish, and German. Translations made with correctness and punctu-Translations made with correctness and punctuality. Professor of Numesmatics, for the classifianny. Professor of Numesmatics, for the classifi-cation and explanation of medals and coins. Pennsylvania avenue, south side, between 6th and 7th streets, opposite Brown's Hotel. Furnished Rooms to rent at that place.

> BROWN'S MARBLE HOTEL, PENNSYLVANIA AVENUE,

WASHINGTON CITY. T. P. BROWN. Sep 21-dtf

Sep 21-dtf

MINE PARLOR GRATES, just received direct from the New York manufacturers, for by W. H. HARROVER, ep 21—eo2w (m) Op. the Patriotic Bank Sep 21—eo2w (m)

Washington Sentinel.

From the Journal of Commerce, Sept. 21. The Crystal Palace.—The Fresnel Light. "So to night-wandering sailors, pale with fears, Wide o'er the watery waste a light appears, Which on the far-seen mountain blazing high. Streams from some lonely watch-tower to the sky." [Hiad, xix, 404.

Perhaps nothing in the Crystal Palacevaried as are its collections of whatever is beau-tiful and useful in art and science—nothing which it contains more strikingly illustrates the great utility of exhibitions of this kind than

the Fresnel light.
This light, the last and most approved of all the ingenious and beneficent contrivances re-sorted to from the days of Homer to our own to diminish the perils of the sea, which, for the occurate scientific knowledge and nice mechanical skill that it displays, is surpassed by nothing in the Palace—this light, but for this exhibition, would be known only to a few accomplished and highly educated persons, who might have seen the manufactory at Paris, or have taken the time and trouble to go down to Cape Hatteras, or Sand Key, to visit the light nouses where they are set up. Now, thanks to the exhibition, the construction and operation of the Fresnel light will be in a few months as familiar to the whole of our mechanical world

as that of a common compass. One of the first-class Fresnel lights is already set up at Sand Key, in Florida, and it being known that another was ordered by the gov-ernment for Cape Hatteras, the following letter was addressed by the President of the Association to the Secretary of the Treasury:

Office of the Association for the Exhibition of the Industry of all Nations. New York, Aug. 12, 1853.

Sir: I take the liberty of addressing you as secretary of the Treasury, and also as president of the light-house board.

A first class Fresnel light, ordered by the light-house board, to be put up at Cape Hatte-ras, has arrived from Paris, and is now in the custom-house here. It is not immediately

wanted by the light-house board, and will no pe for some time, as the tower is not ready for it. The purport of my letter is very respectfully to request you to give permission to let this light be put up in our exhibition building until it is wanted.

My object is not, by any means, so much to ecure for us an additional attraction as to make this great beneficent invention well and familiarly known to our people and our ingenious

At Cape Hatteras it can only be seen by mariners, and from afar-here it can be studied inderstood, copied, and perhaps improved on I carnestly hope you may see as I do the advantages not unlikely to flow from complying with this request.

I should add, that I am informed by a member of the light-house board, that this applica-tion has the cordial concurrence of that body that through them the services of a most competent officer to put it up will be secured; and hat every possible care will be taken of it. May I beg of you the favor of as early a re

ply as your occupation wilt permit?

Believe me, with the highest respect, your obedient servant, THEODORE SEDGWICK.

Hon. JAMES GUTHRIE, Secretary of the Treasury. Washington, D. C.

ferred to in this letter, was, we presume, Captain Dupont, the superintendent of the Crystal The government, with that liberal disposi-

tion which it has uniformly manifested to promote the views of the association, acquiesced in the request contained in this letter, as appears by the following letter from Capt. Hardcastle, of the topographical engineers, and secretary of the light-house board:

· [copy.] TREASURY DEPARTMENT, OFFICE LIGHTHOUSE BOARD, August 18, 1853.

SIR: Your communication of 12th instant to the honorable Secretary of the Treasury, requesting that the first-class Fresnel illuminat ing apparatus designed for Cape Hatteras light may be put up in your exhibition building, was referred to the light-house board, by whom the application of your honorable Association for the Exhibition of the Industry of all Na-

tions was cordially approved.

I am directed by the Secretary of the Treasurv and president of the light-house board to authorize the apparatus to be placed in the xhibition, under the following conditions, viz: but it is to be under the charge of a compe tent officer, and put up and exhibited under his personal supervision—the expenses of the exabition to be defrayed by the association, and the apparatus to be subject to the control of the light-house board, to whom it shall be returned in the same condition as received, whenever it may be required for the public service. This will not be before the middle of October next.

It is suggested that Captain S. F. Dupont, United States navy, a member of the lighthouse board, and connected with the management of the exhibition, superintend this arrangement, and see that the apparatus is placed inder the charge of a competent officer,

Earnestly hoping that the above may be aceptable to you, and that the beneficent objects ou have in view may be accomplished, I have he honor to be, sir, with great respect, your

obedient servant, EDMUND L. F. HARDCASTLE,

Secretary. THEODORE SEDGWICK, Esq., President.

The permission thus being obtained, the next matter was to find the proper person to put it up. Fortunately, Captain George Mead, of the topograpical engineers, who has already put up one of these same lights at Sand Key, in Florida, very liberally offered his services for the purpose, and the Fresnel light, in consequence thereof, under his supervision and superintendence, has been blazing, and revolving, and flashing in the exhibition for the last week-a little crystal palace within the Crystal Palace-Imperium in imperio.

Fancy a twenty-four sided structure of glass. terminated at the top in a sort of truncated cone or dome; the whole being about ten feet high and six feet in diameter—each of the twenty-four sides, instead of being composed of one or more plates of glass, being made partly of twenty-seven segments or sections of a great lens four feet three inches high, and partly of prisms so scientifically calculated, so artistically constructed, and so nicely put together, that each prism refracts the ray from one of its surfaces, reflects it from the second, and, refracting it again from the third, shoots it forth in a sunlike beam of light. Thus, from its twenty-four sides and 1,008 lenses and prisms, at the same instant and perpetually, this marvellous contri-vauce darts forth its dazzling flash, and revol-ving as it flashes, only intermits its light still nore to startle the beholder.

But we are indebted for a full and detailed

description of this light to Capt. Mead's own paratus is made to revolve in a given time, the The object to be attained in the use of lenses

in the illuminating apparatus of a light-house is effected by collecting all the rays emanating from a point in the focus, and, after refracting or bending them from their original paths, projecting them forward in a beam whose axis co-incides with the axis of the lens.

The earliest notice of the application of lenses to light-houses is found in Smeaton's Narrative of the Eddystone, where he states that a London optician, in 1750, proposed grinding the glass of the lantern to a radius of seven feet six inches. Many attempts were made subsequently, at different times, but never succeeded, wing to the imperfect figure of the lens, the impure state of the glass, and its great thickness, which rendered the lens in its effect inferior to the reflectors then in use. The suggestion of building the lenses in separate pieces s due to Condorcet, who, as early as 1773, pointed out the advantages of this method. In 811, Sir David Brewster, in the "Edinboro Cyclopedia," proposed this plan; and in 1822 Augustin Fresnel, of France, made known the ame ingenious mode of constructing these instruments, which he had discovered in 1819, in gnorance of the views and labors of his prederessors. To Fresnel belongs the additional and equally great merit of being the first to execute as well as design; and, in conjunction with M. M. Arrago and Mathieu, of placing a powerful lamp in the focus of the lens—in fact applying it to the practical purpose of a light-house. Hence the method has been called the Fresnel

over the world, and which, within a few years past has been introduced into this country. It would be out of place, indeed impractica-ble, in an notice of this kind, to enter into all the details of the preliminary calculations, and the different processes of the manufacture of these lenses; only a general outline of the various steps can be given. For a more particu-lar account the reader is referred to a very use-ful publication by Alan Stevenson, entitled "An lementary Treatise on the History, Construc-

system, now introduced into light-houses all

tion, and Illuminating of Light-houses," published by John Weale, London, where will be found an able and detailed discussion of the The first point to be effected is the calculation of the surfaces of the different parts.— These calculations, requiring a knowledge of the higher branches of mathematics, are exeedingly minute and complicated—the princioal data on which they are based being the ocal distance and the refractive index of the class. The elements of the different parts being calculated, the glass is cast in moulds exceeding the intended size of the finished parts. The glass hitherto used in France is rown glass, which, though it has a lower reractive power than flint glass, besides having

slight greenish tinge, yet it can more easily be obtained of homogeneous quality, and is, moreover, less subject to deterioration from atmospheric influences, and therefore peculiarly suitable for use in the exposed positions generally occupied by light-houses. The different parts being cast, they are ground to the pro-per size by machinery. This process is very difficult, requiring the greatest care, not only to preserve the optical properties of the surface, but to prevent the transparency of the glass being affected by scratches. Lastly comes the adjustment of the different parts in their reparts of each lens are united by a bronze frame. and, where the glass edges come in contact, by a fine layer of cement. The very acute and delicate edges render this operation a hazard-

ous one, as they are liable to be splintered in the hands of unskilful persons. There are four different orders of these intruments, ranging in size according to the osition they have to occupy, and the distances they are required to be seen. Each order is subdivided into "fixed," "revolving or flashing," and "fixed, varied by flashes." The flashing lights can be varied by the duration of the flash and eclipse, and in some cases colored

flashes have been employed for the sake of distinction. The apparatus now on exhibition is of the first order, and is a revolving or flashing light. Appareil catadioptrique de 1st ordre a eclipses," (a eclats sur toute la hauteur,) constructed by M. Henri Lepaute, No. 247 Rue St. Honore, Paris.

It is composed of a moveable frame, the entral part of which is a right hollow prism f twenty-four sides. Each of these sides is ornfed of a panel, which is a section of an anpular plano-convex lens, four feet three inches in height, (the diameter of the lens,) and nine inches wide. These lenses are constructed, as described above, in separate pieces—the cen-tral disc being eleven inches in diameter, and the annular rings which surround it gradually decrease in breadth as they recede from their axis-their exterior or convex surface being serrated, thus reducing the thickness of the glass, while the optical properties of the lens are preserved. The pieces are united together by fine layers of cement, and the whole firmly cemented into a brass frame. All the light from the lamp in the common focus falling on these lenses is refracted through them, and thrown out in a horizontal beam whose axis is coincident with the axis of the lens. There are, therefore, twenty-four beams projected at the same time from the apparatus when illuminated, and the revolution causes a succession of brilliant flashes, which gives the character to the light.

These lenses are larger than any previously made, being, as stated above, fifty-one inches -whereas the usual height of those hitherto constructed has been about forty inches. There is a limit, however, to the size of the lens, dependent on the incident ray on its edges, which must not fall on it at too small an angle. In consequence of this limit to the size of the lenses, considerable portion of the light passes bove and below them. To prevent its and to cause these rays to contribute their share to the flashes, the apparatus on exhibition has below the lenses a series of four, and above a dome of eleven, catadioptric rings of glass.

These rings are placed in 24 frames corresponding with the panels of the central part, and are triangular prisms, so constructed and adjusted in their frames that all the rays of light impinging on them are, after being refracted at the first surface, reflected from the second and again refracted from the third-projected in horizontal beams whose axes are paralle with the axis of the central lens in the same section of the frame-thus forming one beam of light from the top to the bottom of the apparatus, 8 feet, 10 inches in height, and over 9 inches in width at the centre.

Owing to the light at the common focus not being a mathematical point, the rays emerging from the lenses have a divergence which is calculated at a little over five degrees, and as the 24 panels each occupy 15 degrees, there will be simultaneously projected from the apparatus 24 beams of light, covering each a space of 5 degrees, and 24 intermediate spaces without light, each 10 degrees. If, therefore, the ap-

ratio of the flashes to the eclipses will be as one to two-if the revolution is made in twelve min-

ates, each pannel occupying 15 degrees will be the 1-24th of 42 minutes, or 30 seconds, in passing the eye; and the flash covering 5 degrees, will have a duration of 10 seconds—the intervening eclipse being 20 seconds.

The light is produced by a single lamp placed in the common focus. It is a carcel lamp, with a burner of 4 concentric wicks, the largest being nearly four inches in diameter. These wicks

are kept constantly saturated with oil, which is pumped up from a reservoir below, thus preenting undue carbonization, and producing the maximum brilliancy. The supplying pumps are moved by clock-work. The lamp, consisting of the clock-work, reservoir, and burner, its upon a tripod resting on the stationary part of the apparatus, and by means of set-screws can be very nicely adjusted in the focal plane. A cast iron column, or pedestal, sustains the hole structure, and has on it a shoulder with a bed plate of steel, with a beautiful arrange-ment of friction wheels and rollers by which the moveable frame-work is supported and enabled o revolve. Motion is given to this by a hand some piece of clock-work. The whole machinery and all the iron and brass work, are very com

plete, and well worthy of inspection.

The first apparatus of this kind imported in this country was one of the 1st and one of the 2d order, erected at the highlands of the Navesink, by the Treasury Department. Since 1850, the bureau of topographical engineers, having charge of certain light-houses, placed one of the 3d order in the light-house on Bran-dywine shoal, Delaware Bay—one of the 3d order on the Waugoochance light, Lake Michigan, and one of the first order at Sand Key Gulf of Florida. This is the third apparatus o the 1st order, or largest size, imported into this country, and was ordered by the light-house board for Cape Hatteras, where the dangers of navigation require that no efforts or expense

should be spared to have the best light.

The power of the light exhibited is not accu rately known. The illuminating effect of Fres nel's great lens has generally been taken a 3,000 argand burners-the value of the flame at its focus being about 16—thus giving the in-creasing power of the lens 180. These lenses, with the upper and lower rings of this appa ratus, will, of course, produce a much greater

The consumption of oil in the lamp is about 600 gallons per annum. Comparing the amount of light with the quantity of oil consumed, reolving lights on the dioptric or refracting prin ciple, use oil more economically than those in the catoptric, or reflecting plan, in the ratio of

The power of these lights is also a great con sideration in their favor—enabling them to penetrate fogs and be visible at times when a ceble light would be lost. They can be seen as far as the curvature of the earth will admit; and a case is known where the elevation of the light on the coast of France and of the observer on the English shore, was such as to make the French light distinguished at the distance of fifty miles. They are almost entirely employed in France and on the continent of Europe, and are gradually being put up in England, the great Sherryvore light house having one.

It is believed to be the wish of the light-

The "member of the light-house board," re as to produce the desired effect. The different commerce and navigation should visit and in- it, and all "for the old man;" but becoming roduce the desired result. To the notes, and to Captain Mead's oblig ing explanation, we are indebted for the mate rials of this article. There is also a very in teresting paper on the subject in Appleton's useful Dictionary of Machines, &c., although it

house board to introduce them into all our first

is there very erroneously stated "that the catoptric or reflector system is the only one in use in the United States." P. 663 It thus appears that we are indebted to French skill and genius, not only for some of the most exquisitely beautiful, but also for one of the most useful objects that the palace con-

tains. The graceful forms and unmatched coloring of the Sevres porcelain, the magic web of th Gobelin tapestries, have been for a century the theme of universal admiration; but in nothing is the adaptation of skill and science to the works of man seen to greater advantage than in this interesting and novel beneficent con-

trivance of its French inventor. The inscription placed on the great Pharos of Egypt by its architect was in these simple and touching words: "Sostratus of Cnidos, the son of Deviphanez, to the gods, the saviours for the benefit of seamen. Some phrase equally simple, equally expressive of the reverence due to superior-powers, expressing, too, the surpassing beauty and usefulness of great abilities devoted to the cause of humanity should be placed on the tomb of Augustin

Fanny Fern's Opinion of Sunday.

Sunday should be the best day of all the seven ;-not ushered in with ascetic form, or lengthened face, or stiff and rigid manners Sweetly upon the still Sabbath air should float the matin hymn of happy chilhood; blending with early song of birds, and wafted upward with flowers' incense, to Him whose very name is love. It should be no day for puzzling the half-developed brain of childhood with gloomy creeds, to shake the simple faith that prompts the innocent lips to say, "Our Fath should be no day to sit upright on stiff-backed chairs till the golden sun should set. No; the birds should not be more welcome to warble the flowers to drink in the air and sunlight, or the trees to toss their lithe limbs free and fet terless. "I'm so sorry that to-morrow is Sun-day!" From whence does this sad lament issue? From under your roof, oh mistaken, but well-meaning Christian parents; from the lips of your child, whom you compel to listen to two or three unintelligible sermons, sand wiched between Sunday schools, and finished off at night-fall by tedious repetitions of creeds and catechisms, till sleep releases your weary victim! No wonder your child shudders when the minister tells him that "Heaven is one eternal Sabbath." Oh, mistaken parent! re lax the over-strained bow, prevent the fearful rebound, and make the Sabbath what God designed it-not a weariness, but the "best" and happiest day of all the seven .- Musical Times.

REWARD OF FIDELITY.-Never forsake friend. When enemies gather around; when dark and cheerless, is the time to try true friendship. They who turn from the scene of distress betray their hypocrisy, and prove that interest only moves them. If you have a friend who loves you, who has studied your interest and happiness, be sure to sustain him in adversity. Let him feel that his former kindness is appreciated, and that his love was not thrown away. Real fidelity may be rare, but it exists-in the heart. They only deny its worth and power who never loved a friend, or labored to make a friend happy.

WASHINGTON SENTINEL

TERMS OF ADVERTISING.

angues da ibany

* 1 week 3 00

Yearly advertisements subject to special ar-

rangement. Long advertisements at reduced rates. Religious, Literary, and Charitable notices in serted gratuitously.

The following anecdotes are extracted from the "Editor's Drawer" of HARPER'S MAGAZINE for October-a number replete with articles of merit, historical, instructive and amusing.

All correspondence on business must be prepaid

Very few readers of ".The Drawer" but will remember "Professor" Anderson, the adroit trickist, and the skill with which he managed to blind his audiences to the modus operandi of his operations, some of which, to say the least, were very remarkable, and past finding out, by the shrewdest and most watchful looker on. When the "Professor" said, in his peculiar

"Would an-ny gentleman aw lady lend me a po'ket-engkerchief?—Thenk-ye!" there was mischief; for thereby hung a "trick" that has nitherto defined solution by the most acute and

penetrating observer. But this apart.

There are other "professors" it would seem; and in Europe they abound. Of one of them, a celebrated flute-player, the following amusing anecdote is recorded:

"He advertised a concert for his banefit in a

"He advertised a concert for his benefit in a country-town; and in order to attract those who had no music in their souls, and were not moved by concord of sweet sounds, he an-nounced that between the acts he would exhibit an extraordinary feat, and one never before heard of in Europe. He would "hold in his left hand a glass of wine, and would allow six of the strongest men in the town to hold his arm; and, notwithstanding all their efforts to prevent him, he would drink the wine!

So novel and surprising a display of strength as it was of course naturally enough regarded, attracted a very crowded house. Expectation was on tip-toe, when the "Professor" appeared upon the stage, with a wine-glass full of wine in his hand, and in very polite and courteous phrase, invited any half-dozen men to come forward and put his prowess to the test.

Several gentlemen, among whom was the mayor of the place, immediately advanced to the stage, and grasped the left arm of the "Professor, apparently rendering the performance of his promised feat out of the question. There was an awful pause for a moment, when the manacled "Professor," eyeing the

gentlemen who had pinioned him, said in broken English: "Genteel-mens, are you all ready?" "We are ready!" was the reply, as they grasped still more tightly his left arm.
"Are you quite sure you have got a fast

holds?" The answer having been given in the affirm ntive, by a very confident nod by those to whom it was addressed, the "Professor," to the infinite amusement of the spectators, and to the no small surprise of the group around him, advancing his right arm, which was, of course, entirely free, very coolly took the wine-glass from his left hand, and, bowing very politely to the half-dozen gentlemen who were exhausting

their strength upon his left arm, said: "Genteel-mens, I have the honor to drink all your goot healts!" At the same moment he quaffed off the wine,

amid a general roar of laughter, and universal This is almost equal to the Yankee expedient for "raising the wind," some years ago, in one of our far-western States. The exhibitor had tried various ways of "getting an honest living," as he called it, without hard work. . lie class or sea-coast lights; and it is, therefore, of had toiled for many years on a farm that yieldspective forms, and the union of the whole so great importance that all persons interested in ed a scanty return for the labor bestowed upon mined, as he expressed it, to "leave the old homestead, and shirk for himself."

He first tried clock-peddling; but his instru-ments—not the best made in the world, probably—were returned back upon his hands, having been only "warranted;" he next essayed schoolkeeping; but with a praiseworthy frankuess, he said he failed in that, "cause he did'nt know enough;" then he tried phrenology, which he explained as a "dreadful risky business," bumps was so different on different folks; and, (last but-one-ly,) he essayed dentistry; but his "trav-els" in that humane avocation yielding him but small remuneration, he went into another line.

He mingled Phrenology with Zoology! He gave out that on a certain evening, after his phrenological lecture had been concluded, he would exhibit to the audience two of the most remarkable creatures that had ever been publicly exhibited in any country. They had been caught among the sublime fastnesses of

the Rocky Mountains; and were: First, an animal, known in that remote and eldom-visited region as the "Prock;" a creature that was only caught (and caught always with the greatest difficulty) on the side of a mountain, along which, and nowhere else, could he graze. He had a short hind leg and a short fore leg also, for the convenience o browsing on the mountain side, the discrepancy being intended to keep him erect; and the only way in which he could be caught was to "head him" on the side of a mountain, when he would turn suddenly round, and his long legs coming on the uphill side, he would fall down, from lack of underpinning on the lower side, when he at once became an easy prey to the hunter.
The other animal was called the Guyanosa;

a terrific monster, and very dangerous, caught in one of the wildest passes of the Rocky Mountains by some forty hunters, who secured him by lassos, after he had been chased for four days. Dangerous as he was, however, the lec-turer said he had been strongly secured with chains, and could be seen without any apprehension on the part of the audience. The eventful night at length arrived; the phrenological lecture was delivered to a crowded house; and all the spectators were awaiting

with breathless expectation the rising of a green baize curtain, which had been suspended behind the lecturer, and from whence had come, at different times during the intellectual performance, the most hideous sounds. Before proceeding to exhibit the animals, the lecturer dwelt at some length upon the characteristics of each; and describing especially the ravenous nature of the Guyanosa, and his enormous strength. then retired behind the curtain to arrange the animals for immediate exhibition. There was an interval of some five or six

minutes, when a great clanking of chains was heard, and a roar, half animal, half human, which shook the whole house. In a moment a shriek, as of one "smit with sudden pain." was heard, and out rushed the exhibitor, his bair erect, his eyes staring from their sockets, and

dire terror depicted in every feature:

"Save yourselves! ladies and gentlemen!—
save yourselves!" he exclaimed: the Guyanosa has broken loose, and has already killed the

The house was cleared in two minutes: and. what is remarkable, neither the lecturer, the Prock," nor the "Guyanosa" was ever seen n the village afterward. There where some who doubted whether the

strange animals were present at all; but such incredulous persons were answered by hun-"Why, we heard 'em howl, as plain as we hear you speak !" Of course that settled the question entirely!